

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A method of creating a generic text summary of a document; said method comprising:
 - creating a weighted document term-frequency vector for said document;
 - for each sentence in said document, creating a weighted sentence term-frequency vector;
 - computing a score for each said weighted sentence term-frequency vector in accordance with relevance to said weighted document term-frequency vector; ~~and~~
 - selecting a sentence for inclusion in said generic text summary in accordance with said computing; and
 - deleting said sentence from said document and eliminating terms in said sentence from said document.
2. (currently amended): The method of claim 1 further comprising:
 - ~~deleting said sentence from said document and eliminating terms in said sentence from said document;~~
 - recreating said weighted document term-frequency vector in accordance with said deleting and said eliminating; and
 - selectively repeating said computing, said selecting, said deleting, said eliminating, and said recreating.

3. (original): The method of claim 2 wherein said selectively repeating is terminated when a predetermined number of sentences has been selected.

4. (original): The method of claim 1 wherein said computing comprises calculating an inner product of said weighted sentence term-frequency vector and said weighted document term-frequency vector.

5. (original): The method of claim 1 wherein said creating a weighted sentence term-frequency vector comprises implementing a local weighting function and implementing a global weighting function.

6. (original): The method of claim 5 wherein said creating a weighted sentence term-frequency vector comprises normalizing each said weighted sentence term-frequency vector.

7. (original): The method of claim 1 wherein said creating a weighted document term-frequency vector comprises implementing a local weighting function and implementing a global weighting function.

8. (original): The method of claim 7 wherein said creating a weighted document term-frequency vector comprises normalizing said weighted document term-frequency vector.

9. (currently amended): A system for creating a generic text summary of a document; said system comprising:

a computer;

a display for displaying said generic text summary; and

summarizer program code, operable on said computer, for analyzing and summarizing said document; said summarizer program code comprising:

a vector generator for creating a weighted document term-frequency vector for said document and creating a weighted sentence term-frequency vector for each sentence in said document;

a scoring engine for computing a score for each said weighted sentence term-frequency vector in accordance with relevance to said weighted document term-frequency vector; ~~and~~

a selector for selecting a sentence for inclusion in said generic text summary in accordance with output results from said scoring engine; and

a document editor for deleting said sentence from said document and for eliminating terms in said sentence from said document.

10. (currently amended): The system of claim 9 ~~wherein said summarizer program code further comprises a document editor for deleting said sentence from said document and for~~

~~eliminating terms in said sentence from said document; and~~ wherein said vector generator recreates said weighted document term-frequency vector in accordance with output results from said document editor.

11. (original): The system of claim 10 wherein said summarizer further comprises a loop routine for generating iterative sequential operations of said vector generator, said scoring engine, said selector, and said document editor.

12. (original): The system of claim 11 wherein said loop routine is responsive to a predetermined limit such that said generic text summary is of a predetermined number of sentences.

13. (original): A method of creating a generic text summary of a document; said method comprising:

- decomposing said document into individual sentences;
- forming a candidate sentence set from said individual sentences;
- for each of said individual sentences in said candidate sentence set, creating a weighted sentence term-frequency vector;
- creating a weighted document term-frequency vector for said document;
- for each of said individual sentences in said candidate sentence set, computing a relevance score for said weighted sentence term-frequency vector relative to said weighted document term-frequency vector;

selecting a sentence for inclusion in said generic text summary in accordance with said computing;

deleting said sentence from said candidate sentence set;

eliminating terms in said sentence from said document; and

recreating said weighted document term-frequency vector in accordance with said deleting and said eliminating.

14. (original): The method of claim 13 further comprising:

selectively repeating said computing, said selecting, said deleting, said eliminating, and said recreating.

15. (original): The method of claim 14 wherein said selectively repeating is terminated when a predetermined number of sentences has been selected.

16. (original): The method of claim 13 wherein said computing comprises calculating an inner product of said weighted sentence term-frequency vector and said weighted document term-frequency vector.

17. (original): The method of claim 13 wherein said creating a weighted sentence term-frequency vector comprises implementing a local weighting function and implementing a global weighting function.

18. (original): The method of claim 17 wherein said creating a weighted sentence term-frequency vector comprises normalizing each said weighted sentence term-frequency vector.

19. (original): The method of claim 13 wherein said creating a weighted document term-frequency vector comprises implementing a local weighting function and implementing a global weighting function.

20. (original): The method of claim 19 wherein said creating a weighted document term-frequency vector comprises normalizing said weighted document term-frequency vector.

21. (original): A method of creating a generic text summary of a document; said method comprising:

- constructing a terms-by-sentences matrix for said document;
- performing singular value decomposition on said terms-by-sentences matrix to obtain a singular value matrix and a right singular vector matrix, wherein each sentence in said document is represented by a column vector of a transpose of said right singular vector matrix;
- ranking each right singular vector in said right singular vector matrix; and
- selecting a sentence for inclusion in said generic text summary in accordance with said ranking.

22. (original): The method of claim 21 further comprising repeating said selecting.

23. (original): The method of claim 22 wherein said repeating is terminated when a predetermined number of sentences has been selected.

24. (original): The method of claim 21 wherein said selecting further comprises identifying a sentence having a desired index value with said right singular vector.

25. (original): The method of claim 21 wherein said constructing comprises implementing a local weighting function and implementing a global weighting function.

26. (original): A system for creating a generic text summary of a document; said system comprising:

a computer;

a display for displaying said generic text summary; and

summarizer program code, operable on said computer, for analyzing and summarizing said document; said summarizer program code comprising:

a matrix generator for creating a terms-by-sentences matrix for said document;

an SVD performer for performing singular value decomposition on said terms-by-sentences matrix to generate a singular value matrix and a right singular vector matrix;

a vector analyzer for ranking each sentence in said terms-by-sentences matrix in accordance with index values with said right singular vector matrix; and

a selector for selecting a sentence for inclusion in said generic text summary in accordance with output results from said vector analyzer.

27. (original): The system of claim 26 wherein said summarizer program further comprises a loop routine for generating iterative operation of said selector.

28. (original): The system of claim 27 wherein said loop routine is responsive to a predetermined limit such that said generic text summary is of a predetermined number of sentences.

29. (original): A method of creating a generic text summary of a document; said method comprising:

decomposing said document into individual sentences;

forming a candidate sentence set from said individual sentences;

constructing a terms-by-sentences matrix for said document;

performing singular value decomposition on said terms-by-sentences matrix to obtain a singular value matrix and a right singular vector matrix, wherein each sentence in said candidate sentence set is represented by a column vector of a transpose of said right singular vector matrix;

identifying a right singular vector from said right singular vector matrix;

selecting a sentence for inclusion in said generic text summary in accordance with said identifying; and

selectively repeating said identifying and said selecting.

30. (original): The method of claim 29 wherein said selectively repeating is terminated when a predetermined number of sentences has been selected.

31. (original): The method of claim 29 wherein said selecting further includes identifying a sentence in said candidate sentence set having a desired index value with said right singular vector.

32. (original): The method of claim 29 wherein said constructing comprises implementing a local weighting function and implementing a global weighting function.